

CLAIMS LISTING

1.(Previously Presented) A broadband slot antenna, comprising:
a dielectric layer under which a microstrip feedline is formed;
a ground formed on the dielectric layer and electromagnetically coupled with the microstrip feedline through a slot; and
a reflection plane placed under the microstrip feedline and having an open part with predetermined length and depth in order to prevent board surface waves from being radiated and enhance antenna gain.

2.(Original) The antenna as recited in claim 1, wherein area of an entrance of the slot is the same as that of a bottom of the slot or area of the entrance of the slot is different from that of the bottom of the slot.

3.(Original) The antenna as recited in claim 1, wherein the reflection plane is a metal resonator.

4.(Previously Presented) A slot array antenna, comprising broadband slot antennas, wherein each of the broadband slot antennas includes:
a dielectric layer under which a microstrip feedline is formed;
a ground formed on the dielectric layer and electromagnetically coupled with the microstrip feedline through a slot; and
a reflection plane placed under the microstrip feedline in order to prevent board surface waves from being radiated and enhance antenna gain,
wherein a baffle layer is formed on the ground conductor in order to prevent mutual coupling between the slot antennas and enhance antenna gain.

5.(Original) The slot array antenna as recited in claim 4, wherein the baffle layer reduces the mutual coupling between the slot antennas while arranging the broadband slot antennas and enhances antenna gain.